				DQA:	Date:
NCR:	Yes /	No	WORK ORDER NON-CONFORMANCE / UPDATE		

									QA Closed:	Date	2:
Work Orde	r:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N NCR N	0.				Rework Scrap Use-as-is Work Order Update	Th	Skid-tube  Machining ermoforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initia	I Ad	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief E	ng Desc	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training											
Unapproved	<u> </u>										
						AULT CA	TEGORY		····		
Landin	Bending Centre N Cracks Crushed/			o/s	General Bend BOM/Route Broken/Damaged Burrs	Insp	lware ection Incomplete ructions Incomplete	/Unclear	Ovalized Over/Under Part Incorre Part Lost/M	ct	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
-	Cuffs Heat Trea		Tube		Contamination Countersink Cut Too Short	<del></del>	ntenance abeled ead	-	Part Moved Positioned \ Power Loss/		Other
ľ	Ripples in	•			Drill Holes	0.800	et		٬	- L	
	Torque V	Vaves in E	xtrusion	,	Drawing		₹ of Calibration				
Γ	Turning S	equence			Finish	∵Ç80t	of Sequence				
ľ	/ Wave/Tw	vist in Tuk	10		Folio		side Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Memo

Quality Control

									DQA:	Date:		
NCR: Y	es /	No				WORK ORDER NON-C	ONFOR	MANCE / UP		QA Closed:	Date:	
Work Orde	er:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part N	 Io					Rework Scrap Use-as-is Work Order Update		Skid-tube  Machining  moforming  Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root			·		Descri	ption of work order update	Initial	Ad	tion	Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data						, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			· •			
Equip/Tooling												
Operator								·				
Material											1	
Setup					,							
Other					•							
Process												
Supplier												

**Landing Gear** General Bend Grain Ovalized Pressure/Forced Bending Centre Not Concentric to O/S BOM/Route Over/Under tolerance Temperature/Cure Hardware Broken/Damaged Inspection Incomplete Weld Cracks Part Incorrect Crushed/Crimped, Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Burrs Cuffs Maintenance Contamination Part Moved Mislåbeled Heat Treat Countersink Positioned Wrong Inspection Strip in Tube Other Cut Too Short Misread Power Loss/Surge Drill Holes Ripples in Bend Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube **Outside Dimensions** 

**FAULT CATEGORY** 

Training Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Order ID 93721 Page 3 November-27-12 10:43:28 AM Item ID: D3065-7 Accept \*N900040100\* Setup Start **Revision ID:** Stop Item Name: Step Spacer **Start Date:** 11/27/12 **Start Qty: 20.00 Cust Item ID:** Required Date: 12/07/12 Req'd Qty: 20.00 **Customer:** Reference: Run Process Plan: Date: **Tooling:** Date: Approvals: Date: SPC (Y/N): Date: Sequence ID/ Operation **Tool ID** Tool # Plan Reject Reject Insp. Set Up/ Accept **Work Center ID** Code Qty Qty Number Stamp Description **Run Hours** 160 Chemical Conversion Coat per QSI005 4.1 0.00 \*160\* HandFinish 0.00 Memo Hand Finishing 170 QC3- Inspect Part Finish \*170\* QC Memo Quality Control

180

Identify as per dwg & Stock Location:

0.00

\*180\*
Packaging

Memo

0.00

Packaging

JON-

12-12-24.

											DQA:	Date	e:	
NCR:	Yes	/ No			·	WORK ORDER NON-C	CON	IFORM	MANCE / UPI	DATE				
						<del></del>					QA Closed:	Dat	e: 	
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
	-					Rework			Skid-tube	Crosstube		Water Jet	Enginee	~ <u>~</u>
Part I	۷o					Scrap	]		Machining	Small Fab	4	d. Eng. Coor.	<del></del>	ality
NCR I	No					Use-as-is Work Order Update			noforming Large Fab	Finishing Composite	Rec/Sto	re/Packaging Supplier	0	ther
Root					Descri	ption of work order update	11	nitial	Act	ion	Sign &			
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Descr	ription	Date	Verification	QC Ins	spector
Doc/Data														
Equip/Tooling														
Operator	Ш		•											
Material	Ш													·
Setup														
Other														
Process	Ш													
Supplier	Ш													
Training	Ш		·											
Unapproved			<u> </u>											
							AUL	T CATE	GORY					
Landi	ng G	iear				General	_				•	-		:
	$\vdash$	Bending				Bend	Ш	Grain			Ovalized		Pressure/F	
	Ш	Centre No	ot Concer	ntric to	o/s	BOM/Route	Ш	Hardwa	re		Over/Under	tolerance	Temperati	ure/Cure
	Ш	Cracks				Broken/Damaged	Ш	Inspecti	on Incomplete		Part Incorre	ct [	Weld	
	Ш	Crushed/0	Crimped,			Burrs	Ш	Instruct	ions Incomplete/l	Jnclear	Part Lost/M	issing	Wrong Sto	ock Pulled
	Ц	Cuffs				Contamination		Mainte	nance		Part Moved			
	Ш	Heat Trea	t			Countersink	Ш	Mislabe	led		Positioned V	Vrong		
	Inspection Strip in Tube			<u> </u>	Cut Too Short		Misreac	I		Power Loss/	Surge	Other		
	Ш	Ripples in	Bend			Drill Holes	Ш	Offset						
		Torque W	aves in E	xtrusio	n	Drawing		Out of 0	Calibration					
		Turning S	equence			Finish		Out of S	Sequence					

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

	<b>Work Order ID 93721</b> /ovember-27-12 10:43:28 AM  tem ID: D3065-7			*937	721*						Page 4
Revision ID:	D3065-7 Step Spacer		•	Accept	*N900	<b>040</b>	100	)* s	etup Sta	i V	S1* S2*
Start Date: Required Date: Reference:	11/27/12 12/07/12	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:					
Approvals:	Process Pla	ın:	Date:	Tooling:	Da	ate:	-	R	Run Sta	1/1	R1*
	QC:		Date:	SPC (Y/N):	Da	ate:			Sto	*N	R2*
Sequence ID/ Work Center ID	)	Operation Description  QC21- Final Inspection -	Wark Order Palance	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
*190* QC Quality Control		Memo	work Order Release	0.00					13	1 (10 MF 12-1	2-27
										12-1	0

	•											QA:	Date:	•
NCR: Y	es /	No					WORK ORDER NON-C	O	NFORM	MANCE / UPDATE		·	-	
											QA Clo	sed:	Date	:
Nork Orde	r:						DISPOSITION			AGAINST D	EPARTM	ENT,	/PROCESS	
Part N							Rework Scrap Use-as-is		ı	Skid-tube Crosstube  Machining Small Fab noforming Finishing	Rec		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	o. <u> </u>						Work Order Update			Large Fab Composite			Supplier	
Root					Desc	crip	tion of work order update		nitial	Action	Sign	&		
Cause		Date	Step	Qty		o	r Non-conformance	Ch	ief Eng	Description	Dat	e	Verification	QC Inspector
oc/Data														
quip/Tooling														
perator														
laterial														
etup														
ther														
rocess	1							1						
upplier	7							1						
raining			٠.											
napproved	7													
							F	AUL	T CATE	GORY	<u> </u>			
Landin	g Gea	r					General							
ſ	Be	nding			Γ		Bend		Grain		Ovalize	d		Pressure/Forced
	Ce	ntre No	t Concer	ntric to	o/s		BOM/Route		Hardwa	re	Over/L	Inder	tolerance	Temperature/Cure
Ī	Cr	acks			Ī		Broken/Damaged	Г	Inspecti	on Incomplete	Part In	corre	ct	Weld
Ţ	Cr	ushed/0	Crimped.		Ī		Burrs		i '	ions Incomplete/Unclear	Part Lo	st/M	issing	Wrong Stock Pulled
ŀ		ffs	•		t		Contamination		Mainte	` <b> -</b> -	Part M		~ <b>L</b> _	<b>]</b>
ľ		at Trea	t		•		Countersink		Mislabe		Positio		Vrong	
ļ	Inspection Strip in Tube			Cut Too Short		Misread	<b>⊢</b>	Power			Other			
	_	ples in			t		Drill Holes		Offset	L		•		
F	<b>⊣</b> `	•	aves in E	xtrusio	,		Drawing		1	Calibration				
Ī	_		equence				Finish		ł	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

## **Picklist Print**

November-27-12 10:43:28 AM

Work Order ID:

93721

Parent Item:

D3065-7

Parent Item Name:

Step Spacer

**Start Date:** 11/27/12

Required Date: 12/07/12

Page 1

**Start Qty: 20.00** 

Required Qty: 20.00

Comments:

IPP: C02.11.01Incorporated D3066-1 IPPKJ/RF

IPP Rev:D Now on Water Jet 06-04-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040 2024-T3 .040 sheet		Purchased	No			100	sf	179.7512	0.1574	3.313684 [3.4]	7	o company	Jan12-12-9
				Location		Loc Oty	Lo	c Code					
				MAT022		179.7511626							
				120	605	32.9127416							
				121	197	32.498421							
				122	136	17.39							
				123	217 🖋	96.95			123	3217			

	,				QA Closed:	Date:	
NCR:	Yes /	No	WORK ORDER NON-COM	NFORMANCE / UPDATE			-
					DQA:	Date:	

Work Orde	r:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
	· · · · · · · · · · · · · · · · · · ·				Rework		Skid-tube	Crosstube		Water Jet	Engineering
Part N	lo.				Scrap		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
				,,, <u> </u>	Use-as-is	The	rmoforming	Finishing		re/Packaging	Other
NCR N	lo				Work Order Update		Large Fab	Composite		Supplier	
						<u> </u>					
Root					ption of work order update	Initial	1	tion	Sign &		
Cause	Date	Step	Qty	•	or Non-conformance	Chief Er	ig Desc	ription	Date	Verification	QC Inspector
Doc/Data											ĺ
Equip/Tooling											
Operator							1				
Material											
Setup											
Other											
Process			,					,			
Supplier											
Training											
Unapproved			:		•						
					F <i>A</i>	AULT CA	regory				
Landin	g Gear				General					_	· 
	Bending				Bend	Graii	1 _		Ovalized		Pressure/Forced
Ĺ	Centre No	ot Concer	ntric to (	D/S	BOM/Route	Hard	ware		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	Inspe	ction Incomplete		Part Incorre	ct	Weld
Ĺ	Crushed/	Crimped.			Burrs	Instr	ictions Incomplete/	'Unclear	Part Lost/Mi	issing	Wrong Stock Pulled
	Cuffs				Contamination	Mair	itenance		Part Moved	_	
	Heat Trea	it			Countersink	Misla	beled		Positioned V	Vrong _	
	Inspectio	n Strip in	Tube		Cut Too Short	Misre	ead		Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes	Offse	t		<del>-</del> 		
	Torque W	aves in E	xtrusio	n	Drawing	Out	f Calibration				-
	Turning S	equence			Finish	Out	of Sequence				
	Wave/Tw	ist in Tub	)e		Teolio	Outs	de Dimensions				

DART AEROSPACE LTD	Work Order:	93721
Description: Step Spacer	Part Number:	D3065-7
Inspection Dwg: D3065 Rev: B		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

	1		1	T	T	
Drawing	Tolerance	Actual	Accept	Reject	Method of	Comments
Dimension	1010141100	Dimension	7.000		Inspection	
Ø0.128	+0.005/-0.000	0.130"			V	Jkmoi
0.865 (Pitch)	+/-0.005	0.868	_		V	be
4.522	+/-0.010	34.516"	_		ν	ų
0.250	+/-0.010	0,255	_		V	u
2.093	+/-0.010	7.099"	_		V	h
3.936	+/-0.005	3,939	_		V	ч
4.186	+/-0.010	4.190"	_	-	ν	ч
Ø1.250	+/-0.005	(, 25°)	_		V	Ł1
R0.125	+/-0.010	0,125	_		RG	
Grain Direction	N/A		V			
	7 7					
			ı	l		

Measured by: Jm	Audited by:	049	Prototype Approval:	N/A
Date: 12-12-9	Date:	18 12(17(1)	Date:	N/A

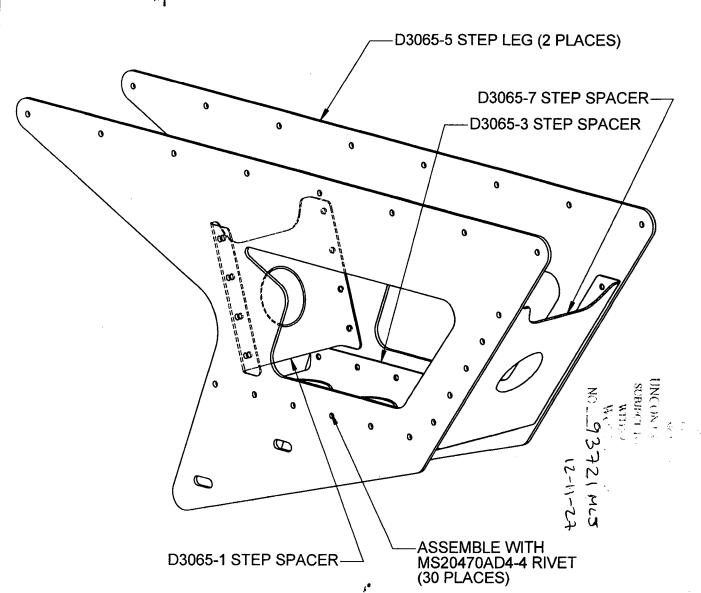
Rev	Date	Change	Revised by	Approved
Α	03.09.22	New Issue P/O D3065-041	KJ/RF	
В	04.05.15	Removed 0.531, 3.686, 0.580; Added 3.936 dimensions	KJ/JLM LA	21
С	06.06.23	Dwg Rev. changed	KJ/JLM	\J.11



DESIGN DRAWN BY		DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECK	ED ED	APPROVED	DRAWING NO.	REV. B	
	PH		D3065	SHEET 1 OF 5	
DATE OC OF OO		), OO	TITLE	SCALE	
06.05.23			STEP LEG ASSEMBLY	1:2	
Α	A 02.09.11		NEW ISSUE		
B 06.05.23			ADD 6061-T6 MATERIAL ADD SLOTS TO D3065-5		

# RELEASED

de ct. 20 Aff

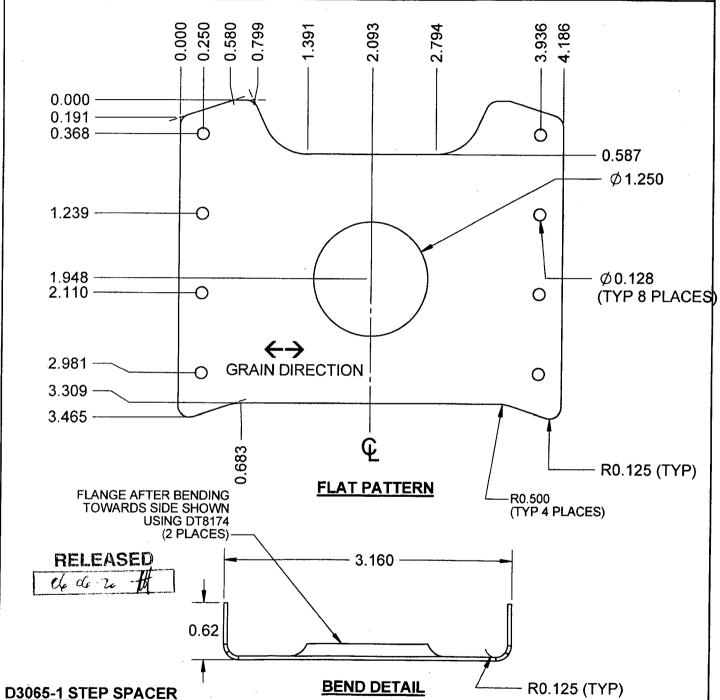


# **D3065-041 STEP LEG ASSEMBLY**

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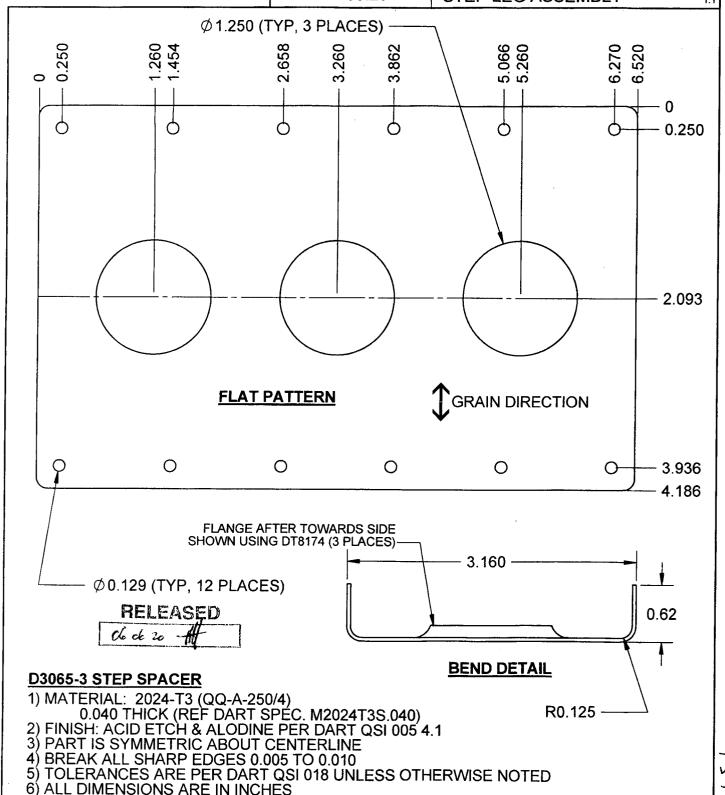


- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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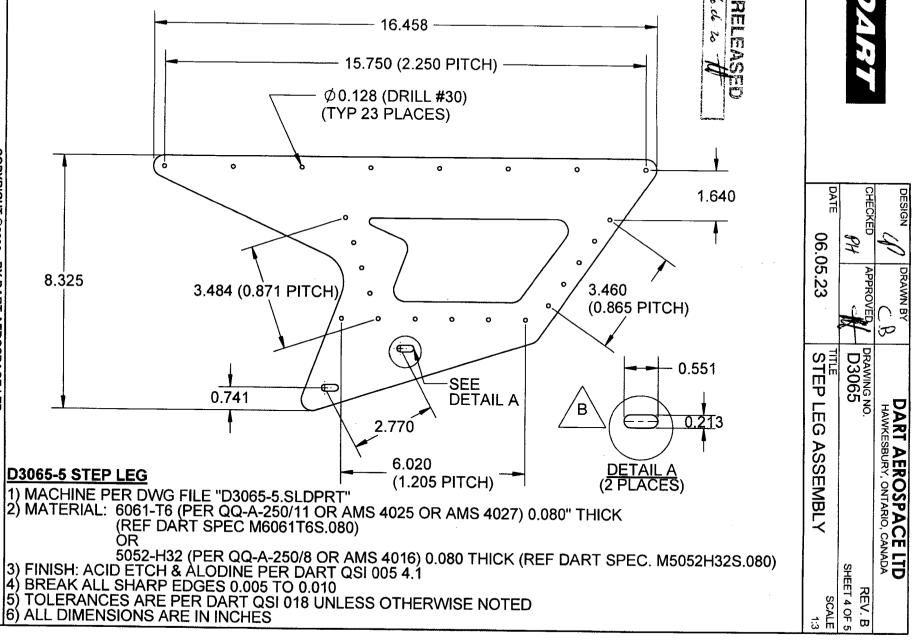






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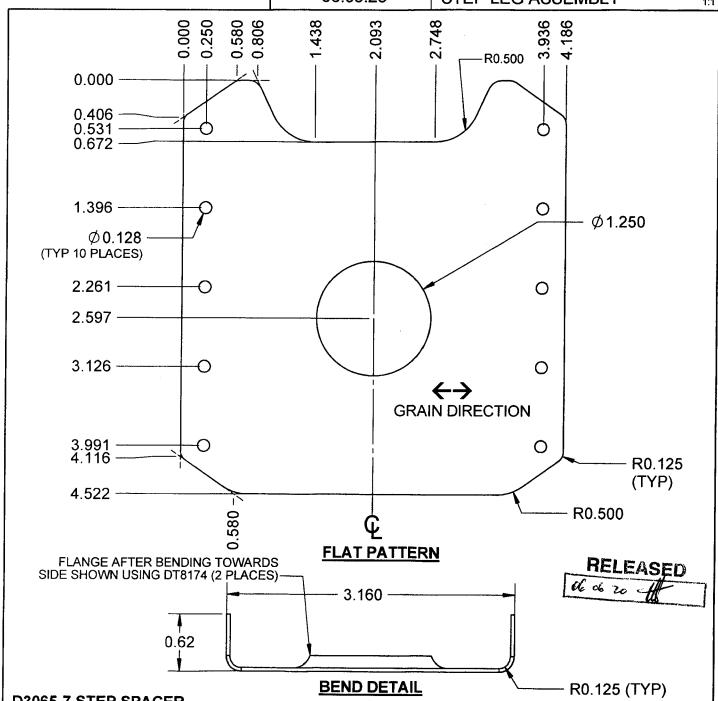




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### D3065-7 STEP SPACER

- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S.040)

- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
  3) PART IS SYMMETRIC ABOUT CENTERLINE
  4) BREAK ALL SHARP EDGES 0.005 TO 0.010
  5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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